

# Recovery Plan Action Status

**Plan Name: Bonytail Chub Revised Recovery Plan Goals**

**Plan Status: Final Revision 2**

**Plan Date: 01-Aug-02**

**Lead Agency: USFWS**

**Lead Office: Upper Colorado River Endangered Fish Recovery Program**

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969-7322 )

| Species                      | Action Priority # | Action # | Action Description  | Action Status   | Est. Initiation Date | Est. Completion Date | Responsible Parties   | Work Type  | Labor Type   | Action Comments |
|------------------------------|-------------------|----------|---|-----------------|----------------------|----------------------|---|--|--|-----------------|
| Bonytail chub (Gila elegans) | 1                 | A-1.1    | Identify, implement, evaluate, and revise (as necessary through adaptive management) flow regimes to benefit bonytail populations in the Green River and upper Colorado River subbasins.  | Ongoing Current | Prior to FY 1995     |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Acquisition, Management: Habitat Maintenance and Manipulation, Research: Habitat Requirements, Research: Management Techniques | Contract, Internal Field Assistance, Internal Technical Assistance, Species Expert |                 |
| Bonytail chub (Gila elegans) | 1                 | A-1.2    | Provide flow regimes (as determined under Task A-1.1) that are necessary for all life stages of bonytail to support recovered populations in the Green River and upper Colorado River subbasins.  | Ongoing Current | Prior to FY 1995     |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Acquisition: General, Management: Habitat Maintenance and Manipulation   | Contract, Internal Technical Assistance  |                 |
| Bonytail chub (Gila elegans) | 1                 | A-2.1    | Continue to provide fish passage over Redlands Diversion and Grand Valley Diversion to allow adequate movement of bonytail in the upper Colorado River and Gunnison River (see section 4.1 for a discussion on barriers to fish passage). | Ongoing Current | FY 1995 - FY 1999    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Management: Habitat Maintenance and Manipulation   | Contract, Internal Technical Assistance  |                 |

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| Bonytail chub (Gila elegans) | 1                 | A-2.2    | Modify Price-Stubbs Dam and Government Highline Dam to allow adequate movement of bonytail in the upper Colorado River.   | Complete      | FY 2000 - FY 2004    | FY 2008              | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Management: Habitat Maintenance and Manipulation | Contract, Internal Field Assistance, Internal Technical Assistance, Species Expert |                 |
| Bonytail chub (Gila elegans) | 1                 | A-3.1    | Investigate the feasibility of modifying releases from Aspinall Unit dams to increase water temperatures in the Gunnison River that would allow for upstream range expansion of bonytail in the Gunnison River (see section 4.1 for discussion on warm-water releases). | Complete      | FY 2000 - FY 2004    | FY 2000 - FY 2004    | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Research: Management Techniques                  | Contract, Internal Technical Assistance  |                 |
| Bonytail chub (Gila elegans) | 1                 | A-3.2    | Modify releases from Aspinall Unit dams to increase water temperatures in the Gunnison River, if determined feasible and necessary to achieve demographic criteria for the upper Colorado River subbasin.   | Obsolete      |                      |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Work type not yet selected                       | Labor type not yet selected  |                 |

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|------------------------------|-------------------|----------|---|--------------------|----------------------|----------------------|---|--|--|---|
| Bonytail chub (Gila elegans) | 1                 | A-4.1    | Identify measures (e.g., screens, baffles) to minimize entrainment of subadult and adult bonytail at problematic diversion structures, such as the Green River Canal, Grand Valley Irrigation Canal, Government Highline Diversion Project, and the Redlands Canal Company Diversion. | Partially Complete | Prior to FY 1995     |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Management: Habitat Maintenance and Manipulation | Internal Technical Assistance, Species Expert                                      |   |
| Bonytail chub (Gila elegans) | 1                 | A-4.2    | Install devices and/or implement other measures (as determined under Task A-4.1) to minimize entrainment.   | Partially Complete | FY 1995 - FY 1999    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Management: Habitat Maintenance and Manipulation | Contract, Internal Technical Assistance  |   |
| Bonytail chub (Gila elegans) | 1                 | A-5.1    | Identify habitats that are necessary for the establishment and maintenance of bonytail populations in the Green River and upper Colorado River subbasins.   | Planned            |                      |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Management: Habitat Maintenance and Manipulation | Contract, Internal Field Assistance, Internal Technical Assistance, Species Expert | Awaiting establishment of populations through reintroductions |
| Bonytail chub (Gila elegans) | 1                 | A-5.2    | Provide habitats (as determined under Task A-5.1) for all life stages of bonytail that are necessary to support recovered populations in the Green River and upper Colorado River subbasins.  | Planned            |                      |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Management: Habitat Maintenance and Manipulation | Contract, Internal Field Assistance, Internal Technical Assistance, Species Expert | Awaiting establishment of populations through reintroductions |

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|------------------------------|-------------------|----------|--|-----------------|----------------------|----------------------|---|-----------------------------|---|-----------------|
| Bonytail chub (Gila elegans) | 1                 | B-1.1    | Reevaluate and, if necessary, identify actions to ensure adequate protection from overutilization of bonytail for commercial, recreational, scientific, or educational purposes; not currently identified as an existing threat.                     | Ongoing Current | FY 2000 - FY 2004    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Management                  | Internal Technical Assistance                 |                 |
| Bonytail chub (Gila elegans) | 1                 | B-1.2    | Implement identified actions (as determined under Task B-1.1) to ensure adequate protection of bonytail populations from overutilization for commercial, recreational, scientific, or educational purposes.  | Ongoing Current | FY 2000 - FY 2004    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Management                  | Internal Technical Assistance                 |                 |
| Bonytail chub (Gila elegans) | 1                 | C-1.1.   | Reevaluate and, if necessary, identify actions to minimize adverse effects of diseases and parasites on bonytail populations; not currently identified as an existing threat (see sections 4.3.1 and A.11 for discussion of diseases and parasites). | Ongoing Current | FY 2000 - FY 2004    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Management: Disease Control | Internal Technical Assistance, Species Expert |                 |
| Bonytail chub (Gila elegans) | 1                 | C-1.2    | Implement identified actions (as determined under Task C-1.1) to ensure adequate protection of bonytail populations from deleterious diseases and parasites.   | Ongoing Current | FY 2000 - FY 2004    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Management: Disease Control | Internal Technical Assistance                 |                 |

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|------------------------------|-------------------|----------|---|-----------------|----------------------|----------------------|---|---|-------------------------------------|-----------------|
| Bonytail chub (Gila elegans) | 1                 | C-2.1    | Develop, implement, evaluate, and revise (as necessary through adaptive management) procedures for stocking nonnative fish species in the Upper Colorado River Basin to minimize negative interactions between nonnative fishes and bonytail.                           | Ongoing Current | FY 1995 - FY 1999    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Management: Predator and Competitor Control | Internal Technical Assistance       |                 |
| Bonytail chub (Gila elegans) | 1                 | C-2.2    | Finalize and implement procedures (as determined under Task C-2.1) for stocking nonnative fish species in the Upper Colorado River Basin to minimize negative interactions between nonnative fishes and bonytail.   | Ongoing Current | FY 1995 - FY 1999    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Management: Predator and Competitor Control | Internal Technical Assistance       |                 |
| Bonytail chub (Gila elegans) | 1                 | C-3.1    | Develop control programs for small-bodied nonnative fishes (e.g., cyprinids and centrarchids) in backwater and flooded off-channel nursery habitats in river reaches occupied by young bonytail to identify levels of control that will minimize negative interactions. | Ongoing Current | Prior to FY 1995     |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Management: Predator and Competitor Control | Contract, Internal Field Assistance |                 |
| Bonytail chub (Gila elegans) | 1                 | C-3.2    | Implement identified levels (as determined under Task C-3.1) of nonnative fish control in backwater nursery habitats in river reaches occupied by young bonytail.   | Ongoing Current | FY 1995 - FY 1999    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Management: Predator and Competitor Control | Contract, Internal Field Assistance |                 |

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|------------------------------|-------------------|----------|---|-----------------|----------------------|----------------------|---|--|-------------------------------------|--|
| Bonytail chub (Gila elegans) | 1                 | C-3.3    | Develop channel catfish control programs in river reaches occupied by bonytail to identify levels of control that will minimize negative interactions.                              | Ongoing Current | FY 1995 - FY 1999    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Management: Predator and Competitor Control, Research: Predation | Contract, Internal Field Assistance |  |
| Bonytail chub (Gila elegans) | 1                 | C-3.4    | Implement identified levels (as determined under Task C-3.3) of channel catfish control in river reaches occupied by bonytail.  | Ongoing Current | FY 1995 - FY 1999    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Management: Predator and Competitor Control                      | Contract, Internal Field Assistance | Experimental management continues to identify level of control needed. |
| Bonytail chub (Gila elegans) | 1                 | C-3.5    | Develop northern pike control programs in reaches of the Yampa and middle Green rivers occupied by bonytail to identify levels of control that will minimize negative interactions. | Ongoing Current | FY 1995 - FY 1999    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Research: Predation  | Contract, Internal Field Assistance |  |
| Bonytail chub (Gila elegans) | 1                 | C-3.6    | Implement identified levels (as determined under Task C-3.5) of northern pike control in reaches of the Yampa and middle Green rivers occupied by bonytail.                         | Ongoing Current | FY 1995 - FY 1999    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Management: Predator and Competitor Control                      | Contract, Internal Field Assistance | Experimental management continues to identify level of control needed. |

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| Bonytail chub (Gila elegans) | 1                 | D-1.1    | Determine mechanisms for legal protection of adequate habitat through instream-flow rights, contracts, agreements, or other means.   | Ongoing Current | Prior to FY 1995     |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Acquisition, Management, Other: Regulations | Contract, Internal Administrative, Internal Field Assistance            |                 |
| Bonytail chub (Gila elegans) | 1                 | D-1.2    | Implement mechanisms for legal protection of habitat (as determined under Task D-1.1) that are necessary to provide adequate habitat and sufficient range for all life stages of bonytail to support recovered populations.  | Ongoing Current | Prior to FY 1995     |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Management                                  | Contract, Internal Administrative, Internal Field Assistance            |                 |
| Bonytail chub (Gila elegans) | 1                 | D-2.1    | Identify elements needed for the development of conservation plans that are necessary to provide for the long-term management and protection of bonytail populations; elements of these plans may include (but are not limited to) provision of flows for maintenance of adequate habitat conditions for all life stages of bonytail, regulation and/or control of nonnative fishes, minimization of the risk of hazardous-materials spills, and monitoring of populations and habitats. | Ongoing Current | FY 2000 - FY 2004    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Management: Planning                        | Contract, Internal Administrative, Internal Field Assistance, Volunteer |                 |

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| Bonytail chub (Gila elegans) | 1                 | D-2.2    | Develop and implement conservation plans and execute agreements among State agencies, Federal agencies, American Indian tribes, and other interested parties to provide reasonable assurances that conditions needed for recovered bonytail populations will be maintained. | Not Started     |                      |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Management: Planning       | Contract, Internal Field Assistance, Volunteer |                 |
| Bonytail chub (Gila elegans) | 1                 | E-1.1    | Evaluate and, if necessary, identify actions to minimize the risk of hybridization to bonytail; not currently identified as an existing threat.   | Ongoing Current | FY 2000 - FY 2004    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Research: Genetics         | Contract, Internal Field Assistance            |                 |
| Bonytail chub (Gila elegans) | 1                 | E-1.2    | Implement identified action (as determined under task E-1.1) to ensure adequate protection of bonytail populations from hybridization.  | Not Started     |                      |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Management: Reintroduction | Contract, Internal Field Assistance            |                 |



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| Bonytail chub (Gila elegans) | 1                 | E-2.1    | Review and recommend modifications to State and Federal hazardous-materials spills emergency-response plans to ensure adequate protection for Colorado pikeminnow populations from hazardous-materials spills, including prevention and quick response to hazard | Ongoing Current | FY 2000 - FY 2004    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Management: Planning | Contract, Internal Field Assistance |                 |
| Bonytail chub (Gila elegans) | 1                 | E-2.2    | Implement State and Federal emergency-response plans that contain the necessary preventive measures (as determined under Task E-1.1) for hazardous-materials spills.   | Ongoing Current | FY 2000 - FY 2004    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Management: Planning | Contract, Internal Field Assistance |                 |
| Bonytail chub (Gila elegans) | 1                 | E-2.3    | Identify locations of all petroleum-product pipelines within the 100-year floodplain of critical habitat and assess the need for emergency shut-off valves to minimize the potential for spills.   | Ongoing Current | FY 2000 - FY 2004    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Management: Planning | Contract, Internal Field Assistance |                 |
| Bonytail chub (Gila elegans) | 1                 | E-2.4    | Install emergency shut-off valves (as determined under Task E-1.3) on problematic petroleum-product pipelines within the 100-year floodplain of critical habitat.  | Ongoing Current | FY 2006              |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Management: Land Use | Contract, Internal Field Assistance |                 |

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| Bonytail chub (Gila elegans) | 1                 | E-3.1    | Identify actions to remediate groundwater contamination from the Atlas Mills tailings pile located near Moab, Utah, in order to restore water quality of the Colorado River in the vicinity of the pile in accordance with the State of Utah and Environmental | Complete        | FY 2000 - FY 2004    | FY 2005              | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Management: Land Use, Other: Regulations | Contract, Internal Field Assistance |                 |
| Bonytail chub (Gila elegans) | 1                 | E-3.2    | Implement actions (as determined under Task E-2.1) to remediate groundwater contamination from the Atlas Mills tailings pile.  | Ongoing Current | FY 2006              |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Management: Land Use, Other: Regulations | Contract                            |                 |
| Bonytail chub (Gila elegans) | 1                 | LB A-1.1 | Identify, implement, evaluate, and revise (as necessary through adaptive management) flow regimes that are necessary for the establishment and maintenance of bonytail populations in the mainstem and/or tributaries.   | Not Started     |                      |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Work type not yet selected               | Labor type not yet selected         |                 |
| Bonytail chub (Gila elegans) | 1                 | LB A-1.2 | Provide flow regimes (as determined under Task A-1.1) that are necessary for all life stages of bonytail to support recovered populations in the mainstem and/or tributaries.  | Not Started     |                      |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Work type not yet selected               | Labor type not yet selected         |                 |

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| Bonytail chub (Gila elegans) | 1                 | LB A-2.1 | Identify measures (e.g., screens, baffles) to minimize entrainment of subadult and adult bonytail at problematic diversion and/or out-take structures.                    | Ongoing Current | FY 2000 - FY 2004    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Work type not yet selected | Labor type not yet selected |                 |
| Bonytail chub (Gila elegans) | 1                 | LB A-2.2 | Install devices and/or implement other measures (as determined under Task A-2.1) to minimize entrainment.   | Ongoing Current | FY 2000 - FY 2004    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Work type not yet selected | Labor type not yet selected |                 |
| Bonytail chub (Gila elegans) | 1                 | LB A-3.1 | Identify habitats that are necessary for the establishment and maintenance of bonytail populations in the mainstem and/or tributaries.                                    | Ongoing Current | FY 2000 - FY 2004    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Work type not yet selected | Labor type not yet selected |                 |
| Bonytail chub (Gila elegans) | 1                 | LB A-3.2 | Provide habitats (as determined under Task A-3.1) for all life stages of bonytail that are necessary to support recovered populations in the mainstem and/or tributaries. | Ongoing Current | FY 2000 - FY 2004    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Work type not yet selected | Labor type not yet selected |                 |

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| Bonytail chub (Gila elegans) | 1                 | LB B-1.1 | Reevaluate and, if necessary, identify actions to ensure adequate protection from overutilization of bonytail for commercial, recreational, scientific, or educational purposes; not currently identified as an existing threat. | Planned         |                      |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Work type not yet selected | Labor type not yet selected |  |
| Bonytail chub (Gila elegans) | 1                 | LB B-1.2 | Implement identified actions (as determined under Task B-1.1) to ensure adequate protection of bonytail from overutilization for commercial, recreational, scientific, or educational purposes.                                  | Not Started     |                      |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Work type not yet selected | Labor type not yet selected | Section 7 consultations complete and Lower Colorado River Multi Species Conservation Plan in place |
| Bonytail chub (Gila elegans) | 1                 | LB C-1.1 | Reevaluate and, if necessary, identify actions to minimize adverse effects of diseases and parasites on bonytail populations; not currently identified as an existing threat.  | Ongoing Current | FY 2000 - FY 2004    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Work type not yet selected | Labor type not yet selected |  |
| Bonytail chub (Gila elegans) | 1                 | LB C-1.2 | Implement identified actions (as determined under Task C-1.1) to ensure adequate protection of bonytail populations from deleterious diseases and parasites.   | Not Started     |                      |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Work type not yet selected | Labor type not yet selected |  |

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| Bonytail chub (Gila elegans) | 1                 | LB C-2.1 | Develop, implement, evaluate, and revise (as necessary through adaptive management) procedures for stocking and to minimize escapement of nonnative fish species into the mainstem, floodplain, and tributaries to minimize negative interactions between nonna | Ongoing Current | FY 2000 - FY 2004    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Work type not yet selected | Labor type not yet selected | Section 7 complete for all fish stocking by Federal and State agencies. |
| Bonytail chub (Gila elegans) | 1                 | LB C-2.2 | Finalize and implement procedures (as determined under Task C-2.1) for stocking and to minimize escapement of nonnative fish species into the mainstem, floodplain, and tributaries to minimize negative interaction between nonnative fishes and bonytail.     | Not Started     |                      |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Work type not yet selected | Labor type not yet selected |   |
| Bonytail chub (Gila elegans) | 1                 | LB C-3.1 | Develop control programs for problematic nonnative fishes in the mainstem, floodplain, and tributaries to identify levels of control that will minimize negative interactions between nonnative fishes and bonytail.  | Not Started     |                      |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Work type not yet selected | Labor type not yet selected |   |

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| Bonytail chub (Gila elegans) | 1                 | LB C-3.2 | Implement identified levels (as determined under Task C-3.1) of nonnative fish control in the mainstem, floodplain, and tributaries.  | Not Started     |                      |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Work type not yet selected | Labor type not yet selected |                 |
| Bonytail chub (Gila elegans) | 1                 | LB D-1.1 | Determine mechanisms for legal protection of adequate habitat through instream-flow rights, contracts, agreements, or other means.  | Ongoing Current | FY 2000 - FY 2004    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Work type not yet selected | Labor type not yet selected |                 |
| Bonytail chub (Gila elegans) | 1                 | LB D-1.2 | Implement mechanisms for legal protection of habitat (as determined under Task D-1.1) that are necessary to provide adequate habitat and sufficient range for all life stages of bonytail to support recovered populations. | Ongoing Current | FY 2000 - FY 2004    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Work type not yet selected | Labor type not yet selected |                 |

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|------------------------------|-------------------|----------|--|-----------------|----------------------|----------------------|---|----------------------------|-----------------------------|--|
| Bonytail chub (Gila elegans) | 1                 | LB D-2.1 | Identify elements needed for the development of conservation plans that are necessary to provide for the long-term management and protection of bonytail populations; elements of these plans may include (but are not limited to) maintenance of genetic diversity in Lakes Mohave or Havasu, provision of flows for maintenance of adequate habitat conditions for all life stages of bonytail, regulation and/or control of nonnative fishes, and monitoring of populations and habitats. | Ongoing Current | FY 2000 - FY 2004    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Work type not yet selected | Labor type not yet selected | Section 7 consultations complete and Lower Colorado River Multi Species Conservation Plan in place |
| Bonytail chub (Gila elegans) | 1                 | LB D-2.2 | Develop and implement conservation plans and execute agreements among State agencies, Federal agencies, American Indian tribes, and other interested parties to provide reasonable assurances that conditions needed for recovered bonytail populations will be maintained.  | Ongoing Current | FY 2000 - FY 2004    |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Work type not yet selected | Labor type not yet selected | Section 7 consultations complete and Lower Colorado River Multi Species Conservation Plan in place |
| Bonytail chub (Gila elegans) | 1                 | LB E-1   | Evaluate and, if necessary, identify actions to minimize the risk of hybridization to bonytail; not currently identified as an existing threat   | Obsolete        |                      |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Work type not yet selected | Labor type not yet selected |  |

| Species                      | Action Priority # | Action # | Action Description   | Action Status | Est. Initiation Date | Est. Completion Date | Responsible Parties   | Work Type                  | Labor Type                  | Action Comments |
|------------------------------|-------------------|----------|--|---------------|----------------------|----------------------|---|----------------------------|-----------------------------|-----------------|
| Bonytail chub (Gila elegans) | 1                 | LB E-2   | Implement identified action (as determined under task E-1) to ensure adequate protection of bonytail populations from hybridization. | Obsolete      |                      |                      | Upper Colorado River Endangered Fish Recovery Program, Native Fish Work Group, USFWS - Region 2, Endangered Species & Fisheries, USFWS Region 6, Endangered Species & Fisheries | Work type not yet selected | Labor type not yet selected |                 |